



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,616	08/16/2006	Yasunori Morimoto	KAW-351-PCT	8665
28892	7590	10/17/2007	EXAMINER	
SNIDER & ASSOCIATES P. O. BOX 27613 WASHINGTON, DC 20038-7613			MAI, ANH T	
		ART UNIT	PAPER NUMBER	
		2832		
		MAIL DATE	DELIVERY MODE	
		10/17/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/589,616	MORIMOTO ET AL.	
	Examiner	Art Unit	
	Anh T. Mai	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1,2 and 6-8 is/are rejected.
- 7) Claim(s) 3-5 is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 8/06.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. ____.
- 5) Notice of Informal Patent Application
- 6) Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oi [6525638] in view of Takahashi [4668544].

Oi discloses:

- a core which has two flange portions 16, 18 provided at ends of the core and is made of a magnetic material 12 [col 2, lines 60-62];
- a winding portion made up of a plurality of layers of conductor wound around the core between the two flange portions of the core;
- characterized in that the winding portion is divided into a plurality of sections 26, 28 between the two flange portions [figure 1].

Oi discloses the invention as claimed as cited above except for a layer of conductor is wound from one end to the other end in each section, and then layers of conductor are wound in alternately reversed directions. Takahashi discloses winding section 5a wherein a layer of wire is wound from one end to the other end in each section, and then layers of conductor are wound in alternately reversed directions as shown in figure 4. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use winding configuration as taught

by Takahashi to the device as disclosed by Oi. The motivation would have been to provide improvement of a multi-layer hollow coil of a self-melting wire [column 3, lines 67-68]. Therefore, it would have been obvious to combine Takahashi with Oi.

With respect to claims 7-8, "transformer and antenna" have been seen as intended use (i.e., when the claim is directed to a circuit device, any recitation concerning the input or output signal of such circuit device or environment in which the circuit device is employed is not part of the inventive circuit device). Only structural and functional limitations are given patentable weight.

3. Claim 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oi in view of Takahashi as applied in claim 1 and further in view of Kijima [59-126610].
Oi in view of Takahashi discloses the claimed invention as cited above except for a boundary surface between adjacent sections inclines to the flange portion of a winding start and the boundary surface of an upper layer is closer to the flange portion than the boundary surface of a lower layer. Kijima discloses as shown in figures 2-5, a boundary surface between adjacent sections inclines to the flange portion of a winding start and the boundary surface of an upper layer is closer to the flange portion than the boundary surface of a lower layer. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use winding configuration as taught by Kijima to the device as disclosed by Oi in view of Takahashi. The motivation would have been reduce potential difference and distributed capacity and improve dielectric strength and efficiency. Therefore, it would have been obvious to combine Kijima in view of Takahashi and further in view of Oi.

Allowable Subject Matter

4. Claims 3-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 3 recites inter alia; *at least a portion near an upper layer of an end face facing the flange portion is apart from the flange portion so as to be farther from the flange portion than a lower layer of the end face.*

Claim 4 recites inter alia; *a flexible member which is detachably attached to the main portion and shaped like letter C in cross section.*

The references of record do not teach or suggest the aforementioned limitation, nor would it be obvious to modify those references to include such limitation.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO892 Form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh T. Mai whose telephone number is 571-272-1995. The examiner can normally be reached on 5/4/9 Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anh T. Mai
Primary Examiner
Art Unit 2832

ANH MAI
PRIMARY EXAMINER

101107

